

**Review Comments on  
Draft NPDES Waste Discharge Permit #101007  
Prepared by Oregon Department of Environmental Quality  
File #64905**

Submitted December 31, 2009

The following provides EPA's review comments on the following document:

- "Public Notice Draft NPDES Waste Discharge Permit #101007" (WDP) prepared by Oregon Department of Environmental Quality (DEQ), 23 pages.

The purpose of the review is to provide input and comment on storm water and wastewater discharges. The review has slight bias towards managing or reducing the potential recontamination of sediments in the Portland Harbor Superfund Cleanup Site. These comments address the Fact Sheet/Permit Evaluation Report (FS/PER) and Draft WDP for Evraz Oregon Steel Mills (EOSM) site. Separate comment documents are provided for each document. The specific comments below are for the Draft Waste Discharge Permit.

**General Comments**

1. The WDP addresses process wastewater, contact cooling water, non-contact cooling water, incidental storm water, and ground water seepage/dewatering. The WDP does not address storm water treatment design, O&M, or monitoring which is included under the Evraz Oregon Steel General Industrial Permit (#1200-Z).
2. Schedule F General Conditions (pp. 14-23) were considered standard DEQ boilerplate and were generally reviewed. However, specific comments are not provided because the general conditions are broadly applicable to all DEQ NPDES permits and they are not specific to the EOSM permit. Schedule F is superseded by the conditions presented in Schedules A through E.

**Specific Comments**

1. **Page 3, Schedule A, #1. Outfall 001: Wastewater Discharge to Willamette River.** The "\*" footnote indicates that a higher flow rate is authorized during a certain storm event (greater than 1.1 inches over a 6-hour period) via an existing 24-inch pipe. What is the location of the rain gage that may be used for this determination? What is the "higher flow rate" allowed and for what duration? The FS/PER describes a 30-inch pipe near the outfall. Is this the same outfall? What is the basis for selecting this particular storm event and what is the expected additional discharge? To facilitate management of the discharge, the permit conditions should be structured to allow identification of the relative contribution of incidental storm water to the process water system in this event. The allowable stormwater discharges have an influence on loading that could affect sediment recontamination.

2. **Page 3, Schedule A, #3. Outfall 002: Intake Water Solids Separator Discharge to the Willamette River.** What is the basis for determining a “visually discernible plume?” Is there a standard observation point (boat or shore)? Perception of a plume will vary from person to person, by weather (cloud cover), and time of day conditions.
3. **Page 6, d) Outfall 002: Intake Water Solids Separator Discharge to Willamette River.** The permittee should provide information on how the edge of the mixing zone will be determined in the field and provide a protocol for visual assessment of the turbidity plume.
4. **Page 7, Schedule B, Note #1.** The permittee will have considerable control over process water discharge timing and frequency. While it is not possible to sample when there is no discharge, the sampling frequency should be required “for each discharge day up to twice weekly” for when there are two or more discharges in the week. The permit could also consider volume-triggered sampling to more clearly define when one “event” ends and the next one begins. This would prevent manipulation of the process water intake, discharge, and storage process to minimize sampling frequency.
5. **Page 7, Schedule B, Note #2.** The maximum allowable interval for repairing/replacing an inoperable continuous recording device should be specified. The discharges are reasonable within their control, so there should be no more than one event missed. A stand-by sampler could also be used to prevent missed events.
6. **Page 7, Schedule B, Note #3.** The minimum/ maximum compositing interval should be specified as a time or flow interval (e.g., minimum of six sample aliquots collected over 4-hour intervals maximum).
7. **Page 7, Schedule B, Note #5.** The sampling interval for cyanide should be specified for preparing the 24-hour composite sample (e.g., minimum of four discrete samples collected at 6-hour intervals).
8. **Page 7, Schedule B, Note #6.** An acceptable method for compositing the four discrete volatile organic grab samples consisting of 100 mL vials should be specified. We are not familiar with any approved method that preserves the sample integrity. Otherwise, the permit should specify laboratory analysis of the discrete samples.
9. **Page 10, Schedule D, #1.c.(3): Acute Toxicity Testing Organisms and Protocols.** The specifics related to the composite sample should be provided (e.g., 24-hour composite with minimum of six aliquots at 4-hour intervals maximum) .
10. **Page 10, Schedule D, #1.c.(4): Acute Toxicity Testing Organisms and Protocols.** Please identify the source of the dilution waters used for the WET tests? EPA -821-R-02-012 allows use of either synthetic (laboratory) or receiving water as dilution waters and recognizes the importance of selection, preparation, and handling of dilution water.

11. **Page 10, Schedule D, #1.c.(5): Acute Toxicity Testing Organisms and Protocols.** The basis for the acute WET toxicity threshold should be provided (e.g., dilution at the edge of ZID is 18, therefore 5.5% or 1/18 is the allowable acute toxicity threshold).
12. **Page 11, Schedule D, #1.d.(4): Chronic Toxicity Testing Organisms and Protocols.** Same comment as above. The specifics related to the 24-hour composite sample should be provided (e.g., 24-hour composite with minimum of six aliquots at 4-hour intervals maximum).
13. **Page 11, Schedule D, #1.d.(4): Chronic Toxicity Testing Organisms and Protocols.** Same comment as above. What will be the source of the dilution waters used for the WET tests?
14. **Page 11, Schedule D, #1.d.(5): Chronic Toxicity Testing Organisms and Protocols.** The basis for the allowable chronic WET toxicity should be provided. Since the mixing zone dilution is 141, the chronic toxicity threshold is 1/141 or 0.7%
15. **Page 12, Schedule D, #1.e.(4): Chronic Toxicity Testing Organisms and Protocols.** Same comment as above. What will be the source of the dilution waters used for the WET tests?
16. **Page 12, Schedule D, #1.g.(2): Evaluation of Causes and Exceedances.** The permit simply requires re-testing within two weeks and subsequent notification for any WET test indicating toxicity. The permit should consider Toxicity Identification/Reduction Evaluation plan requirements to ensure timely response to repeated toxicity events and to facilitate addressing transient toxicity conditions.
17. **Page 13, Schedule D, #5: Flow Measurements.** The specified maximum deviation of  $\pm 5\%$  from the true discharge rate may not be reasonably attainable. Suggest using  $\pm 10\%$  as is typical of other DEQ permits.